

CLAIMS

The invention claimed is:

1. A wireless demand validation system for assessing market potential for
5 wireless service within a service area, comprising:
 - a wireless test radio configured to mimic the air interface of a wireless communication system interface by transmitting autonomous registration signals to wireless units within the service area, and by receiving registration messages from responding wireless units within the service area;
 - 10 a database configured to store information associated with the registration messages; and
 - a host computer system configured to analyze the information stored in the database to determine the market potential for wireless service within a service area.
- 15 2. The wireless demand validation system of claim 1, wherein the test radio is further configured to transmit a query message to a responding wireless unit to obtain additional information about the responding wireless unit.
3. The wireless demand validation system of claim 1, wherein the host
20 computer system is further configured to use the information received from a responding wireless unit to obtain additional information about the responding wireless unit from an information source other than the wireless unit.
4. The wireless demand validation system of claim 3, wherein the host
25 computer system communicates with the information source over the wireless system, a public switched telephone network, a data network, or the Internet.
5. The wireless demand validation system of claim 3, wherein the
30 information source comprises a wireless system clearinghouse.
6. The wireless demand validation system of claim 3, wherein the information source comprises a credit report server.

7. The wireless demand validation system of claim 1, wherein the database stores records for each responding device indicating a directory number, equipment identifier, a home system identifier, and most recent registration identifier associated with the responding wireless unit.

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8. The wireless demand validation system of claim 1, wherein the test radio is further configured to cause a responding wireless unit to seek registration with a different wireless system after receiving the registration message from the responding wireless unit.

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9. The wireless demand validation system of claim 1, wherein the test radio causes the responding wireless unit to seek registration with a different wireless system by transmitting a message indicating that wireless service is not available through the test radio.

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10. A method of assessing market potential for wireless service within a service area, comprising the steps of:

deploying a wireless test radio configured to mimic the air interface of a wireless communication system interface;

5 transmitting autonomous registration signals from the test radio to wireless units within the service area;

receiving registration messages from responding wireless units within the service area;

storing information associated with the registration messages in a database;

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analyzing the information stored in the database to determine the market potential for wireless service within a service area.

11. The method of claim 10, further comprising the step of transmitting a
15 query message to a responding wireless unit to obtain additional information about the responding wireless unit.

12. The method of claim 10, further comprising the step of using the
20 information received from a responding wireless unit to obtain additional information about the responding wireless unit from an information source other than the wireless unit.

13. The method of claim 12, further comprising the step of communicating
25 with the information source over the wireless system, a public switched telephone network, a data network, or the Internet.

14. The method of claim 13, wherein the information source comprises a wireless system clearinghouse.

30 15. The method of claim 13, wherein the information source comprises a credit report server.

16. The method of claim 10; wherein the database stores records for each responding wireless device indicating a directory number, equipment identifier, a home system identifier, and most recent registration identifier associated with the responding wireless unit.

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17. The method of claim 10, further comprising the step of causing a responding wireless unit to seek registration with a different wireless system after receiving the registration message from the responding wireless unit.

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18. The method of claim 10, further comprising the step of transmitting a message to a responding wireless unit indicating that wireless service is not available through the test radio.

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19. A method of assessing potential base station locations for wireless service, comprising the steps of:

deploying a wireless test radio configured to mimic the air interface of a wireless communication system interface at a first potential base station location;

transmitting autonomous registration signals from the test radio at the first potential base station location to wireless units;

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receiving a first set of registration messages from responding wireless units;

storing information associated with the first set of registration messages in a database;

deploying the wireless test radio at a second potential base station location;

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transmitting autonomous registration signals from the test radio at the second potential base station location to wireless units;

receiving a second set of registration messages from responding wireless units;

storing information associated with the first set of registration messages in a database; and

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analyzing the information stored in the database to determine whether the first or second potential base station location is a preferred base station location.

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20. The method of claim 19, further comprising the step of causing each responding wireless unit to seek registration with a different wireless system after receiving the registration message from the responding wireless unit.